

Doctor couple's model that helps people and builds rural economy

They moved to remote Sittilingi in Tamil Nadu, built a hospital, then integrated 'backwards' into farming. Through organic farming, women-led producer companies and markets, they tackled malnutrition, debt

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In business, backward integration means moving upstream to control one's inputs. In a small valley in Tamil Nadu, that idea has been turned into an experiment in social medicine. Instead of stopping at curing illnesses in a ward, the Sittilingi Tribal Health Initiative (THI) has pushed steadily 'backwards' into farming, food and livelihoods, trying to change the conditions that make people sick in the first place.

What started off as a small effort, with two doctors encouraging four farmers to take up organic farming in 2005, is now a registered producer company, Sittilingi Organic Farmers Association (SOFA), with a turnover of Rs 3 crore.

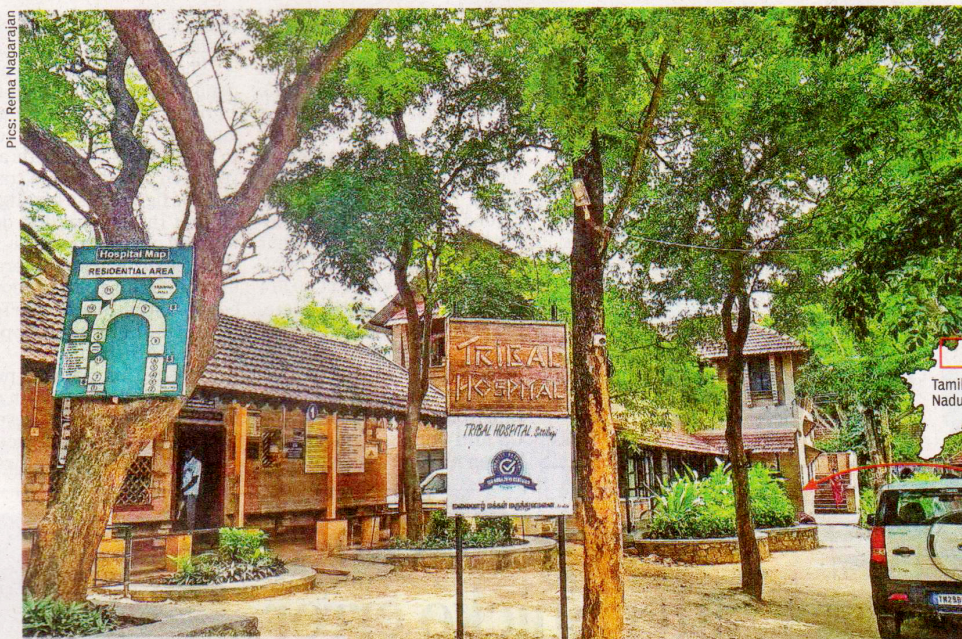
The story begins in 1993, when a doctor couple, Dr Regi George and Dr Lalitha Regi, known locally as G and Tha, chose to work in Sittilingi, a remote valley in Dharmapuri district. The nearest town was about 80km away and the roughly 17,000 tribal residents had almost no access to formal healthcare. Drawing on Gandhian ideas of self-sufficiency, the couple decided any health system here would have to be for and by the people themselves.

They started in a thatched mud hut, training local women as nurses and health workers who could prevent illness, recognise symptoms and treat common diseases. Over time, that hut became a 35-bed hospital with two operating theatres, an intensive care unit, a maternity ward, ultrasound and ECG facilities, a lab and even a blood storage unit. The results have been dramatic: infant mortality has fallen from around 150 deaths per 1,000 live births to about eight, and there have been no maternal deaths recorded in the valley in the last 20 years.

Many of the illnesses they treated could be traced to lives marked by debt, migration and poor diet.

Beyond The Hospital Walls

To understand what lay behind those illnesses, the doctors set out on a six-month *padayatra* in 2003, going from village to village. Behind the idyllic green facade of paddy fields and coconut groves, they found small farmers trapped in debt. Many



The Sittilingi Tribal Health Initiative (THI), which started out modestly in 1993, is now a 35-bed hospital



A plot of land in Sittilingi used for organic farming

were borrowing from moneylenders just to buy fertilisers and pesticides. When they asked who was in debt and who used chemical inputs, the same hands went up.

At the same time, traditional millet-based diets had been nudged aside by free polished rice from ration shops. Malnutrition and anaemia were common, especially among women and children. Debt pushed families to migrate to distant cities, where they lived in crowded, unsanitary conditions and often returned with tuberculosis and other infections. For G and

Tha, the link to health was obvious. Poor food, unstable livelihoods and forced migration were feeding disease. If they wanted lasting change, they would have to integrate treatment backwards into farming and the local economy.

The Organic Turn

The doctors began nudging farmers towards organic methods. In 2005, four farmers agreed to experiment, a bold step for families already in debt. The couple took them to visit organic farms in the region to interact with farmers already practis-

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- Thatched mud hut, 35-bed hospital
- Has two operating theatres, intensive care ward, ultra-sound, blood storage
- Infant mortality down to 1,000 births
- Antenatal care improved
- Zero maternal deaths in last 20 years



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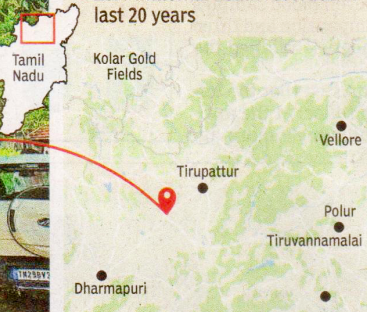
Model that heals rural economy

When integrated 'backwards' into farming and crafts. Markets, they tackled malnutrition, debt and migration



HOW HOSPITAL HAS CHANGED LIVES

- Thatched mud hut in 1993, 35-bed hospital now
- Has two OTs, an ICU, maternal ward, ultrasound, ECG, lab and blood storage facility
- Infant mortality down to 8 per 1,000 births from 150 in 1993
- Antenatal coverage has improved from 11% to 88%
- Zero maternal death recorded in last 20 years



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Doctors Regi George and Lalitha Regi

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backed by a collective, could help them stay rooted to their land.

By 2007, 30 farmers were willing to switch, a number that quickly went up to 60. And, in 2008, they registered SOFA, which later became a producer company. Today, as many as 700 farmers from Sittilingi are registered as members and shareholders.

The transition was anything but easy. For the first two years, yields dropped as the soil recovered from heavy chemical use. Farmers say it took nearly three years before harvests matched ear-

lier levels. "But organic farming is also labour-intensive and you need to find enough labour at the right time for weeding or else they become so overgrown that you need more labour for weeding and costs go up," said Selvaraj, one of the first farmers to shift to organic farming. Markets were another hurdle, he added. Without organic certification, traders refused to pay a premium and offered the same rates as that for conventionally grown crops. Group certification took six years, after which SOFA began distributing organic seeds.

Yet, the collective slowly shifted the balance of power. "It was difficult, but finally we were not in debt anymore," said Valarmati, Selvaraj's wife. "Once our society was formed, we could take loans from the society at very low interest." The society gives loans to women to buy cows, goats and chicken, whose manure went back into the fields. With lower input costs, better soils and more reliable credit, many households were finally able to come out of chronic debt.

"Earlier, the farmers were forced to spend on transporting their produce more than 70km away to sell in mandis, where they had to pay 8% mandi commission. And the buyers, knowing they could not possibly transport all of it back, could drive prices down. Now, they drop it off at the SOFA processing centre, and they know we always pay them more than the market rate. We realised the importance of marketing very early and we would bag advance orders so that farmers could plan the planting of crops," explained Manjunath, the CEO of SOFA, who joined the doctors in 2003.

Millets & Changing Diets

SOFA also learnt that to improve both incomes and diets, farmers needed control over what happened after harvest. The association set up a solar-powered millet processing centre in Sittilingi, mechanising work that used to be done by hand. The byproducts of milling are turned into cattle feed and vermicompost, using up 95% of the produce. Over time, the unit began to produce organic fertilisers and pesticides, bottling local honey, extracting cold-pressed oil and making soaps.

A key principle was that farmers must keep part of their harvest for home consumption. SOFA insisted on this and opened a local outlet so non-member families could also buy millets, pulses and spices grown in the valley. For 32-year-old Priya, now SOFA's stock supervisor, the change shows up in what she feeds her children. Both were born in the THI hospital and, she says, were raised on breastmilk, cow milk and homemade millet-based food. Mothers do not buy

branded commercially-produced nutritional drinks any more, she says proudly. SOFA's products now travel to cities like Chennai and Bengaluru, but perhaps the bigger shift is that farmers themselves are eating more of what they grow.

Women's Pride

If SOFA addressed food security and indebtedness through agriculture, another venture sought to use craft to advance women's livelihood. In 2006, Dr Lalitha helped set up a small stitching and embroidery unit named Porgai, which means "pride" in the Lambadi dialect. A master tailor was brought in from UP to teach cutting and stitching, and commercial sewing machines were installed to shape a tailoring collective.

Today, Porgai is a producer company with turnover of over Rs 1 crore, providing work to about 60 women. Its garments and accessories travel to exhibitions, boutiques. They are also exported, with the designs having won international recognition. In the valley, though, its importance lies in the way it ties cultural pride to economic self-reliance for the women.

Health, Economy, Governance

For the doctors at THI, SOFA and Porgai are not side projects but part of a single health strategy. Diseases, as Dr Regi often says, are created not only by germs but also by poverty, poor food, lack of education and unstable income. By building farmer and artisan cooperatives, they are trying to treat those deeper causes. Moreover, when you form a cooperative and have the numbers, you can determine governance, says Dr Regi, referring to how one of THI's nurses got elected as the panchayat president and, in that role, improved roads, electricity, drinking water and anganwadi services.

The impact is visible in the hospital's registers. There has been a marked fall in diseases linked to under-nutrition in the valley, and anaemia among pregnant women has declined, said Dr Ravikumar Manoharan, better known as "Ravi anna" (elder brother in Tamil), who has taken over the everyday running of the hospital. However, like much of India, Sittilingi is seeing a rise in the incidence of diabetes and hypertension. THI now works on these too, counselling people to shift away from rice-heavy diets.

The story is still unfolding. THI is building a larger hospital in the Kalrayan hills, aiming to serve around 80,000 people with care closer to where they live. Meanwhile, SOFA and Porgai continue to look for ways to expand employment opportunities within the valley so that its people can stay rooted to their land and their communities.